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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,669	12/09/1999	TETSURO MOTOYAMA	5244-0117-2X	7939

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ALEXANDRIA, VA 22314

EXAMINER
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PRIETO, BEATRIZ

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/457,669

Applicant(s)

MOTOYAMA, TETSURO

Examiner

Prieto B.

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 52-62, 68-87, 89-111 and 113-124 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-62, 64-87, 89-111 and 113-124 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9 PDS of various dates
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

1. This communication is in response to Request for Reconsideration filed 5/10/05, has been considered, claims 52-62, 68-87, 89-111, 113-124 remain pending, claims 63, 88, 112 have been canceled 52, 61, 76, 77, 101 have been amended.
2. Information disclosure statement filed 04/1/05 and 05/23/05 comprising related cases submitted on a list other than on a form PTO-1449 or PTO/SB/08A and 08B, have been considered and initialed accordingly (see MPEP §609).
3. Applicant's argument filed 05/10/05 have been fully considered but not found persuasive (see response to argument section below).

***Claim Rejection under 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 52-54, 57-62, 64-65, 69, 76-79, 82-87, 89-90, 94 and 101 are rejected under 35 U.S.C. 102(b) as being anticipated by Kraslavsky et. al. (US 6,889,263) (Kraslavsky hereafter).

Regarding claim 52, Kraslavsky a system/method (Fig. 1) comprising: an business office device (4) configured to connect via a network (6) to a monitoring device (14) that monitors said business office device (col 9/lines 35-50), said business office device comprising:

a memory (114, 111 or 228) within said business office device storing status information thereof (col 8/lines 9-23, col 17/lines 31-49);

an "communications e-mail" interface within the business office device using an "Internet e-mail" protocol, i.e. set of instructions supporting data communication (application programs), at an application layer (Figs. 7/11) for transmission of an electronic message "e-mail" containing a first portion of the status information to the monitoring device (col 12/line 15-col 13/line 20, 49-65, col 18/line 60-col

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19/line 4, col 25/lines 45-63, col 40/lines 26-31), said business office device is a printer (col 10/lines 27-30).

Regarding system claim 76, Kraslavsky teaches a "business" system (Figs. 1-2) including the limitations discussed on claim 52, same rationale of rejection is application, and further, the business office device from a remote location (col 11/lines 62-col 12/line 5) or located remotely from the monitoring device (Figs. 1-2).

Regarding claim 77, this monitoring method claim, comprises substantially the same limitations discussed on claims 52 and 76, same rationale of rejection is applicable.

Regarding claim 101, this claim comprises the computer program product, comprising: a computer storage medium and a computer program code mechanism embedded in the computer storage medium for internally monitoring functions discussed on claims 52, 76-77, same rationale of rejection is applicable.

Regarding claim 53, an "direct connection mode-based" interface for transmitting to the monitoring device a second portion or first portion the status information (Kraslavsky: col 7/lines 55-63, col 14/lines 35-67, direct connection via a modem and communication line, col 7/lines 49-63).

Regarding claim 54, wherein the first "e-mail" interface and the second "direct connection-mode" interface can each transmit at least one of the first and second portions of the status information (Kraslavsky: col 18/lines 17-33, 46-59).

### ***Claim Rejection under 103***

6. Quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action may be found in previous office action.

7. Claims 55-56, 66-68, 70-75, 78-79, 80-81, 91-93, 95-100, 104-105, 115-117, and 119-124 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kraslavsky in view of U.S. Patent No. 5,184,179 (Tarr hereafter).

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Regarding claim 55, the above-mentioned reference fails to teach wherein said transmission is at a predetermined (time) interval.

Tarr teaches a business office (52) device status information to a monitoring (54) device (col 3/lines 33-40, col 5/lines 2-30); the office device including a memory (504/506) for storing status information (Fig. 6) (col 3/lines 61-col 4/line 3 and col 4/lines 60-67); and

transmitting status information to the monitoring device at a predetermined interval (col 3/lines 33-40 and col 5/lines 2-30).

It would have been obvious to one ordinary skilled in the art at the time the invention was made given the suggestions of Kraslavsky for remotely monitoring and controlling peripheral device from a remote location, the teachings of Tarr for monitoring copiers would be readily apparent. One ordinary skilled would be motivated to automatically notify remotely located parties at appropriate time of status information of monitoring device, taught by Tarr, to enhance Kraslavsky upon request mechanism making it more automated.

Regarding claim 56, the business office device transmits the first portion of the status information to the monitoring device when an event occurs in the business office device (Tarr: co 6/line 55-col 7/line 3).

Regarding claim 57, wherein the one memory comprises a "semi-static" memory for storing an assigned name of the business office device (Kraslavsky: col 34/lines 12-16).

Regarding claim 58, wherein the assigned name is communicated to the monitoring device (Kraslavsky: col 33/lines 32-56).

Regarding claim 59, wherein the memory comprises a "semi-static" memory for storing an assigned address of the business office device (Kraslavsky: col 34/lines 12-16).

Regarding claim 60, wherein the assigned address (413 of Fig 9) is communicated to the monitoring device (Kraslavsky: col 28/lines 23-35).

Regarding claim 61, said first portion of the status information is transmitted based on a request received from the monitoring device (Kraslavsky: col 19/lines 36-53, col 20/lines 49-65).

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Regarding claim 62, wherein the request is received via electronic message (Kraslavsky: col 10/lines 31-38).

Claim 63 (Canceled).

Regarding claim 64, wherein the one memory comprises a persistent "semi-static" memory for storing an "option" configuration information (Kraslavsky: col 10/lines 1-25, 58-62).

Regarding claim 65, wherein the one memory comprises a persistent "static" memory for storing a model (version) number (Kraslavsky: col 54/lines 13-23).

Regarding claim 66-68, wherein the at least one memory comprises a static memory for storing a serial number (Tarr: col 5/lines 30-47), and for storing characteristics of the device that do not change over a life of said business office device (e.g. its serial number discussed above) and a dynamic memory for storing dynamic data (Tarr: col 3/line 61-col 4/line 3).

Regarding claim 69, wherein the at least one memory comprises a dynamic memory for storing an indication of a paper tray present in the business office device (Kraslavsky: col 34/lines 42-51).

Regarding claims 70 and 74, wherein the memory comprises a dynamic memory for storing an indication of a voltage used in the business office device (Tarr: col 8/lines 56-67) and an indication of sensitivity of photoreceptor in the business office device (Tarr: col 5/line 60-col 3/line 2).

Regarding claim 71-73 and 75, a dynamic memory for storing an indication of a status of paper in a paper tray present in the business office device, an indication of a status of toner in the business office device (Tarr: col 3/lines 16-31, col 5/lines 60-col 6/line 2), an indication of consumable goods (e.g. oil), amount of toner, number of prints (Tarr: col 5/line 60-col 6/line 2)

Regarding claim 78, establishing a direct connection to the monitoring device (direct modem-telephone connection Tarr: col 3/lines 33-40, col 5/lines 2-30); and transmitting, across the direct connection, at least one of a second portion of the status information and the first portion of the status information (Tarr: col 11/lines 17-26).

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Regarding claim 79, wherein the step of storing comprises storing the status information in a common memory such that both the first and second portions of the status information are read from the common memory (Tarr: col 4/lines 4/line 60-col 5/line 8, diagnostic information stored in memory 28, col 7/lines 66-col 8/line 6, storing status information col 10/line 53-66).

Regarding claims 80-87, and 89-100, these comprise the monitoring method claims associated with the business office device discussed on claims 55-62, and 64-75, same rationale of rejection is applicable.

Claim 88 (Canceled).

Regarding claims 102-111 and 113-124, these claims are the computer program product, comprising a computer storage medium and the computer program code embedded in the computer storage medium for monitoring the business office device, the computer program code comprising the computer code configured to perform the functions/steps of the method discussed on claims 77-87 and 89-100, same rationale of rejection is applicable.

Claim 112 (Canceled).

### ***Response to Arguments***

8. Regarding claims 52-54, 57-62, 64-65, 69, 76-79, 82-87, 89-90, 94 and 101 are rejected under 102 as being anticipated by Kraslavsky, applicant has pointed to Board of Patent Appeals and Interference (the Board hereafter) decision (12/23/03), with respect to the claim clause "transmitting Internet electronic mail messages" as failing to be taught by Kravlavsky.

In response to the above-mentioned argument, applicant's remarks have been fully considered. However, under the new ground of Rejection in accordance with 37 CFR § 1.196(b) entered under 102 as being anticipated by Kraslavsky. The Board sustained the following teachings with respect to the Kraslavsky reference.

Kraslavsky discloses a printer 4 (Fig. 1) on a local area network (LAN) 6. The printer includes a network expansion board (NEB) interfacing the printer to the LAN. The network may use network software, such as Unix software, to effect communication over the various network members (column 4, lines 1-58). With use of the NEB, verbose amounts" of status information may be provided from the printer 4 to the LAN, including more than the simple "out of paper" and "off line" status messages that

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prior systems allowed (column 6, lines 18-62). Software on the network administrator's PC 14 allows request of status information from the printer (column 14, lines 27-48). Software at the remote printer outputs the device status information in response (column 18, lines 34-59). *The communications may use TCP/IP protocol*, if the LAN is running a Unix operating system (column 18, line 60-column 19, line 4). As shown in Figure 5C, the network administrator may request detailed status information from the printer (or other peripheral device on the network, if equipped with an NEB), the status *information being transmitted* from the printer *through the LAN* to the administrator's PC 14 (column 20, line 49-column 21, line 15).

Kraslavsky thus discloses a monitoring device (PC 14) which determines information to be transmitted to a monitored device (printer 4), the information including a request for status of the printer determined using sensors within the printer, such as sensors that ascertain if the printer is off-line or out of paper. The transmission of status information through "*electronic mail*" in view of the broadest reasonable interpretation of "electronic mail," requires "the transmission of messages over a communications network" - we find no difference between the relevant claim 10 requirement and the transmission of the PC 14 message to printer 4, over the LAN 6 using TCP/IP protocol within a Unix operating system, as disclosed by Kraslavsky.

Our evaluation of the declaration does not convince us that the broadest reasonable interpretation of "electronic mail" requires an interpretation that excludes the electronic communications described by Kraslavsky.

9. Regarding claims 52-54, 57-62, 64-65, 69, 76-79, 82-87, 89-90, 94 and 101 are rejected under 102 as being anticipated by Kraslavsky, applicant has pointed to Board of Patent Appeals and Interference (the Board hereafter) decision (12/23/03), with respect to the claim clause using an "Internet e-mail" protocol, as failing to be taught by Kravlavsky.

In response to the above-mentioned argument, applicant's remarks have been fully considered. Claim limitation reads, an "communications e-mail" interface within the business office device using an "Internet e-mail" protocol, i.e. set of instructions supporting data communication (application programs), at an application layer for transmission of an electronic message "e-mail" containing a first portion of the status information to the monitoring device.

Kraslavsky teaches where the NEB 2 is bundled with *software modules* including internal *NetWare®-compatible modules* running on the *NEB 2 inside the printer*, where the specific NetWare®-compatible programs developed for use with the NEB 2 (e.g., the customized CPSEVER and



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CRPRINTER programs) column 12, lines 14-29); The NEB-embedded software provides both the *NetWare®-compatible node and NetWare®-compatible print services directly inside the printer 4* without the overhead of a work station PC and its DOS operating system. The NEB-embedded software comprises a plurality of *application modules* (CPSEVER, CRPRINTER, etc.), real-time service modules, *network protocol stacks*, and a *MONITOR program* which performs *application* switching, process extension, device semaphores, and shares buffer-pool management. The functionality of the NEB is determined by the types of *application modules* and the number of *protocol stacks of network layered communication software* that are configured into the NEB 2. Interaction between the printer 4 and the network is coordinated by the MONITOR program which responds to real-time events while allocating NEB processing time to each application module on a multi-tasking basis (column 12/lines 53-column 13/line 4); The *NEB software functions* at two layers: a "run-time" or real-time layer; and a "soft-time" or *applications layer*. The run-time layer is comprised of components of NEB software that respond to microprocessor interrupts. This layer services devices such as a timer, queued data transfer requests from the SCSI port, or LAN data through the protocol stack routine, and the CPSOCKET (to be discussed in section 4j below) communication mechanism (col 13/lines 5-12); where the runtime layer function represent a soft-time application layer for receiving data over the network in one of the following software protocols, e.g. NetWare® over SPX/IPX, UNIX over TCP/IP or Mac Systems 7 over Appletalk. Basically, the software protocol type may be determined according to the frame packet type sensed (column 18/lines 60-column 19, line 4).

Argument that the reference fails to teach an "Internet e-mail" protocol, i.e. set of instructions supporting data communication, i.e. application programs, at an application layer, are not persuasive.

10. Applicant's arguments filed 05/10/05 have been fully considered but not found persuasive.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Andrew T. Caldwell can be reached at (571) 272-3868. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks  
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Faxed to the Central Fax Office:  
(703) 872-9306 (old No. in service until Sept. 15, 2005),  
(571) 273-8300 (New Central Fax No.)

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(703) 306-5631 for TC 2100 Customer Service Office.

B. Prieto  
TC 2100  
Primary Examiner  
July 22, 2005

  
**BEATRIZ PRIETO**  
**PRIMARY EXAMINER**